

Appln. No.: 10/797,176
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Response dated August 13, 2009
Reply to Office Action mailed May 13, 2009

REMARKS

Claims 1-16 and 18-30 are pending in the Application, all of which stand rejected by the Office Action mailed May 13, 2009. Claims 16 and 24 are amended by this response. Claims 1, 11, 16, and 24 are independent claims, while claims 2-10, 12-15, 18-23, and 25-30 depend either directly or indirectly from independent claims 1, 11, 16, and 24, respectively.

Applicants respectfully request reconsideration of claims 1-16 and 18-30 in light of the following remarks.

Rejection of Claims Under 35 U.S.C. §112

Claims 24-30 stand rejected under 35 U.S.C. §112, first paragraph “as failing to comply with the written description requirement” because “[t]he claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” (Office Action at p. 2.) Specifically, the Office Action asserts that “[o]n 10/06/2006, new claims 24-30 were presented with subject matter, i.e., computer-readable storage, which was not described [i]n the specification in such a way as to reasonably convey that the inventor had possession of the claimed invention.” (*Id.*)

Applicants respectfully traverse this rejection. Applicants respectfully submit that, in addition to the support pointed out in previous submissions (for example, [0036]), “computer-readable storage” is also supported by the Specification at, for example, [0044], which reads as follows:

[0044] The mobile handset 107 may comprise an update agent capable of updating firmware, software applications, etc. The mobile handset may also comprise a download agent 133, a device server 119, a random access memory

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(RAM) 145, firmware 135, operating system 137, applications 139, downloaded update package 149, Number Assignment Module (NAM) 147, upload agent 131, and an update application (UA) loader 129. The download agent 133 may be capable of downloading update packages from external systems, such as device server 119, for example. The elements of mobile handset 107, illustrated in Figure 1, may be provisioned by the electronic device network 105 when the mobile handset 107 is initially set-up and operated.

Applicants respectfully submit that such a mobile handset comprising, *inter alia*, a RAM, an operating system, firmware, a download agent capable of downloading update packages, and applications would reasonably convey that the inventors “had possession of” the claimed invention, including “computer-readable storage.” The Specification also provides examples of elements that would also support computer-readable storage elsewhere in a network, such as the device server 119 and update store 121 of Fig. 1. (See also Fig. 2 at, e.g., refs. 219 and 221; see also *id.* at [0081] discussing use of FUSO (firmware update service option) number.) For at least the reasons discussed above, as well as discussed in previous submissions, Applicants respectfully submit that the Specification reasonably conveys that the inventors “had possession of” the claimed invention, including “computer-readable storage” as claimed by claim 24.

Rejection of Claims Under 35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles *et al.*, U.S. Patent No. 6,615,038 (hereinafter “Moles”) in view of Lee *et al.*, U.S. Patent Application Publication No. 2004/0031029 (hereinafter “Lee”), Shah, U.S. Patent No. 6,029,065 (hereinafter “Shah ‘065”), and Bridges *et al.*, U.S. Patent Application Publication No. 2003/0186695 (hereinafter “Bridges”). Further, claims 11-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles in view of Shah ‘065 and Bridges. Also, claims 16, 20, and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles in view of Chang *et al.*, U.S. Patent Application Publication No. 2002/0028673 (hereinafter “Chang”). Additionally, claims 18-19 and 21-

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22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles and Chang, further in view of Shah '065. Finally, claims 24-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles in view of Shah '065 and Chang. For at least the reasons discussed below regarding, along with the reasons discussed in previous submissions, Applicants respectfully submit that the cited art, either alone or in combination, does not teach, suggest, or otherwise render obvious the presently claimed subject matter. Further, Applicants respectfully submit that the Office Action does not present a *prima facie* case of obviousness for claims 1-16 and 18-30.

Applicants appreciate the Office Action's apparent recognition that the previously relied upon cited art combinations do not render the presently claimed subject matter unpatentable. However, Applicants respectfully submit that the newly cited art combinations do not remedy the shortcomings of the previously relied upon art, and respectfully traverse the rejections as discussed more fully below, as well as for the reasons discussed in previous submissions.

Before addressing individual claims, Applicants note that the Office Action addressed previous statements by the Applicants regarding the required showing for motivation as part of an obviousness finding by stating as follows:

Note: Examiner wants to respectfully reminds applicants that the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. [citations omitted] In this correspondence, the motivation is found in the knowledge generally available to one of ordinary skill in the art, i.e., to ease or facilitate over-the-air provisioning.

(Office Action at p. 31.) As an initial matter, Applicants respectfully submit that the Office Action provides no explanation or support for how the various purported

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motivations were generally available to one of ordinary skill in the art. In any event, the MPEP further provides:

The rationale to support a conclusion that the claim would have been obvious is that “a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and that there would have been a reasonable expectation of success.” DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co., 464 F.3d 1356, 1360, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006). If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.

MPEP §2143. Applicants respectfully submit that the various purported “motivations,” such as “to ease or facilitate over-the-air provisioning” do not explain how such a motivation would motivate one “to achieve the claimed invention.” For example, with respect to claim 1, the Office Action provides no explanation or rationale for how or why “eas[ing] or facilitat[ing] over-the-air provisioning” would lead one, for example, to do anything with respect to provision parameters specific to updating during provisioning of a NAM. As with the previous submission, to the extent the Office Action relies on a “teaching suggestion motivation” rationale, Applicants respectfully submit that the Office Action fails to provide sufficient findings to support a *prima facie* case of obviousness. (See MPEP § 2143.) In any event, regardless of what rationale the Office Action purports to assert, the cited combinations fail to teach, suggest, or otherwise render obvious the presently claimed subject matter, as further detailed below.

Claims 1-10 are Allowable Over the Cited References

Applicants respectfully submit that Moles in view of Lee, Shah ‘065, and Bridges does not render claims 1-10 obvious. Independent claim 1 recites a mobile electronic device network employing provisioning techniques for updating electronic devices, the network comprising, *inter alia*, “...wherein one or more **parameters specific to updating** of firmware and software in the electronic device are **provisioned, during**

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provisioning of a number assignment module (NAM) in the electronic device, by the network.” Applicants respectfully submit that the cited art, either alone or in combination, does not render such a mobile electronic device network obvious, because it does not teach, suggest, or otherwise render obvious at least those aspects of independent claim 1.

The Office Action acknowledges that the “combination of Moles, Lee, and Shah, however, does not specifically disclose a network wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned during provisioning of a number assignment module.” (Office Action at p. 6.) However, the Office Action asserts that Bridges remedies this acknowledged shortcoming in the teachings of the other references, stating as follows:

However, Bridges discloses that in a reprogramming scenario, the PSL/IRDB will be downloaded will be downloaded [sic] with other OTAF information similar to that for new activations. In other words, upon reprogramming, if the National Account (NA), COS, MIN (i.e., NAM parameters) and/or any other parameters change, each changed parameter is reprogrammed or downloaded into the mobile station 68 along with the new PSL/IRDB. If none of the parameters have changed, only the updated PSL/IRDB is downloaded to the mobile station 68 (see paragraph 78. Also refer to paragraph 123).

As can be seen above, PSL/IRDB are updated (i.e., provisioned) during provisioning of NAM parameters.

(Office Action at p. 6.) Applicants respectfully submit that such assertions do not properly support a *prima facie* case of obviousness, as the discussed aspects of Bridges do not teach, suggest, or otherwise render obvious “parameters **specific to updating of firmware and software**,” let alone “wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network” as claimed. For example, the Office Action relies on “the National Account (NA), COS, MIN” as “i.e., NAM parameters.” As such, Applicants understand the Office

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Action to be asserting the “PSL/IRDB” of Bridges as “one or more parameters specific to updating of firmware and software.” However, Bridges defines a “PSL” as a “Preferred System Identification List” for cellular systems, and an “IRDB” as an “Intelligent Roaming Database Downloading” for cellular, PCS and other wireless systems. (See Bridges at [0046].) As Bridges explains, “When the mobile station is roaming, the PSL or IRDB is accessed to indicate the band where the mobile station will find a preferred system.” (*Id.*) Thus, the “PSL/IRDB” indicates a band where a mobile station will find a preferred system, and has nothing to do with updating whatsoever, let alone teaching, suggesting, or otherwise rendering obvious “one or more parameters specific to updating of firmware and software,” even further still let alone provisioning such parameters specific to updating of firmware and software during provisioning of a number assignment module as claimed.

Nor can the “National Account (NA), COS, MIN” teach such parameters specific to updating of firmware and software. As an initial matter, Applicants note that the Office Action relies on these aspects of Bridges as purportedly teaching NAM parameters, and not parameters specific to updating. In any event, Applicants respectfully submit that Bridges defines “COS” as a “class of service...designator” assigned to a subscriber (see Bridges at [0075]), and a MIN as a “Mobile Identification Number” (see *id.*). Applicants respectfully submit that a “National Account,” “class of service designator,” or “Mobile Identification Number” do not teach anything with respect to parameters **specific to updating** of firmware and software.

An examination of the cited portions of Bridges confirms the failure of Bridges to teach, suggest, or otherwise render obvious parameters specific to updating of firmware and software, let alone “wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network” as claimed. For example, the first cited portion (namely, paragraph 78) reads as follows:

[0078] In the reprogramming scenario, the PSL/IRDB will be downloaded with other OTAF information similar to that for

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new activations. In other words, upon reprogramming, if the National Account (NA), COS, MIN and/or any other parameters change, each changed parameter is reprogrammed or downloaded into the mobile station 68 along with the new PSL/IRDB. If none of the parameters have changed, on the update PSL/IRDB is downloaded to the mobile station 68.

Again, such a “PSL/IRDB” (or “Preferred System Identification List”/“Intelligent Roaming Database Downloading”), or “National Account (NA), COS, MIN” do not teach, suggest, or otherwise render obvious anything with respect to parameters **specific to updating**, let alone “wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network” as claimed. The other cited portion of Bridges (paragraph 123) reads as follows:

[0123] Each of the slave PSL/IRDBs 186 may comprise logical entities within, for example, an Over-The-Air Activation Function (OTAF). The OTAF may comprise a software application residing on a computer or workstation, and be adapted to store and forward information to be programmed into the mobile stations. The master PSL/IRDB 192 may update all OTAF/slave PSL/IRDBs 186 with new information concerning target or preferred systems as required or as information becomes available. When the master PSL/IRDB 192 is updated with new PSL/IRDB information, each of the OTAF/slave PSL/IRDBs 186 may receive the information from the master PSL/IRDB 192 through, for example, a Transmission Control Protocol/Internet Protocol (TCP/IP) connection, format the information for the mobile stations, and send the formatted information to the mobile stations through the cellular or PCS network. Along with the new PSL/IRDB information set from the master PSL/IRDB 192, a list of the mobile stations requiring updating may be sent to all OTAF/slave PSL/IRDBs 186. Each of the OTAF/slave PSL/IRDBs 186 would then be responsible for updating the mobile stations, and may keep track of the mobile stations that have been updated with new intelligent roaming information and those that still require updating. Each of the mobile stations may be identified by its Mobile Identification Number (MIN) or International Mobile Station Identity (IMSI). The mobile

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station identity may also identify the mobile station's Home Location Register (HLR).

Applicants note that this portion of Bridges mentions a "list of the mobile stations requiring updating." However, such a mere mention of a "list" does not teach a parameter specific to updating, let alone such a parameter that is provisioned **in an electronic device** as claimed, for example, or further still a parameter provisioned in an electronic device during provisioning of a NAM. Even further still, the "list" is of mobile stations to be "updated with new intelligent roaming information," which is quite different from, and does not teach or suggest, parameters specific to **updating of firmware and software**. As such, this portion of Bridges is also silent with respect to "wherein one or more parameters specific to updating of firmware and software in the electronic device are provisioned, during provisioning of a number assignment module (NAM) in the electronic device, by the network" as claimed.

For at least the above reasons, as well as those discussed in previous submissions, Applicants respectfully submit that the Office Action does not present a *prima facie* case of obviousness for claim 1 and its dependent claims 2-10; that the cited references do not teach, suggest, or otherwise render obvious those claims; and that those claims are allowable.

Claims 11-15 are Allowable Over the Cited References

Applicants now turn to the rejection of claims 11-15. Applicants respectfully submit that Moles in view of Shah '065 and Bridges does not render claims 11-15 obvious. Applicants begin by noting that claim 11 recites a mobile electronic device network adapted to update electronic devices and perform over-the-air number assignment module parameter provisioning comprising, *inter alia*, "an electronic device comprising one of firmware and software, the electronic device also comprising **number assignment module parameters specific to updating one or both of firmware and software.**" (emphasis added).

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In rejecting claims 11-15, the Office Action relies on a combination of Moles, Shah '065, and Bridges. (See Office Action at p. 13.) Applicants appreciate the Office Action's recognition that "[t]he combination of Moles and Shah, however, does not specifically disclose a network wherein the electronic device also comprising number assignment module parameters specific to updating one or both of firmware and software." (See *id.* at p. 15.) However, the Office Action asserts that Bridges remedies this recognized failure in the teaching of the other cited references, relying on the same aspects of Bridges as it relies on in connection with claim 1, including paragraphs 78 and 123. (See *id.* at p. 15-16.)

For similar reasons as discussed above with respect to claim 1, Applicants respectfully traverse these rejections. For example, the cited aspects of Bridges, including the "PSL/IRDB," "NA," "COS," and "MIN" are not parameters specific to updating one of software or firmware. Instead, these aspects of Bridges relate to, for example, indicating the band where the mobile station will find a preferred system, or as another example, to designating a class of service, or, as a further example, to a Mobile Identification Number. Even if these aspects of Bridges may be updated themselves (see Office Action at p. 16: "each changed parameter is reprogrammed or downloaded..."), such a teaching does not somehow transform them into parameters specific to updating one of software or firmware. The "PSL/IRDB," for example, even if changed or updated itself, still relates to indicating a band where the mobile station will find a preferred system, and not to updating, let alone to being "specific to updating" as claimed. These aspects of Bridges do not teach, suggest, or otherwise render obvious anything with respect to parameters **specific to updating one of software or firmware**, let alone "number assignment module parameters specific to updating one or both of firmware and software."

For at least the above reasons, as well as those discussed in previous submissions, Applicants respectfully submit that the Office Action does not present a *prima facie* case of obviousness for claim 11 and its dependent claims 12-15; that the

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cited references do not teach, suggest, or otherwise render obvious those claims; and that those claims are allowable.

Claims 16, 20, and 23 are Allowable Over the Cited References

Next, Applicants address the rejection of claims 16, 20, and 23 as being unpatentable over Moles in view of Chang.

Applicants respectfully traverse the rejection of claim 16. For example, Applicants respectfully submit that the cited references do not teach determining a value of one of a firmware update service option number and a software update service option number **during** an over-the-air parameter administration operation for programming number assignment module parameters. Nevertheless, independent claim 16 is amended by the present response to further clarify certain patentably distinct aspects of its claimed subject matter, incorporating aspects generally similar to aspects previously expressly recited in, for example, claim 11, to recite a method of updating software in a wireless communication device in a wireless network, the method comprising, *inter alia*, “determining a value of one of a firmware update service option number and a software update service option number in the wireless communication device by the wireless network during an over-the-air parameter administration operation for programming number assignment module parameters, wherein the one of a firmware update service option number and a software update service option number is a number assignment module parameter specific to updating one or both of firmware and software.” For reasons similar to those discussed above in connection with claims 1 and 11, Applicants respectfully submit that the previously cited prior art does not teach, suggest, or otherwise render obvious at least “wherein the one of a firmware update service option number and a software update service option number are a number assignment module parameter specific to updating one or both of firmware and software” as claimed. Applicants further respectfully submit that Chang does not teach a number assignment module parameter specific to updating, let alone “wherein the one of a firmware update service option number and a software update service option number are a number

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assignment module parameter specific to updating one or both of firmware and software" as claimed. For example, Applicants respectfully submit the "NAM indicator blocks" of Chang are not related to updating, let alone specific to updating one or both firmware and software. Furthermore, even if the "SERVICE_FIELD" option (which describes supported service options) being utilized for provisioning (see claim 6 of Chang) is somehow argued as being related to updating (see Office Action at p. 21), such a field still does not teach parameters **specific** to updating, and is further silent with respect to a **number assignment module parameter** specific to updating.

For at least the above reasons, as well as those discussed in previous submissions, Applicants respectfully submit that the cited references do not teach, suggest, or otherwise render obvious claim 16 and claims 20 and 23 that depend therefrom, and that those claims are allowable.

Claims 18-19 and 21-22 are Allowable Over the Cited References

Additionally, claims 18-19 and 21-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles and Chang, further in view of Shah '065. Applicants note that claims 18-19 and 21-22 depend from claim 16, which Applicants respectfully submit is allowable as discussed above. Further, Applicants note that the Office Action does not assert Shah '065 as teaching the above discussed shortcomings in the other cited references, and respectfully submit that Shah '065 does not remedy the above discussed deficiencies in the other cited references. Therefore, for at least the reasons discussed above, Applicants respectfully submit that claims 18-19 and 21-22 are allowable.

Claims 24-30 are Allowable Over the Cited References

Applicants now address the asserted §103(a) rejections of claims 24-30. These claims stand rejected under 35 U.S.C. §103(a) as being unpatentable over Moles in view of Shah '065 and Chang. Applicants respectfully submit that the cited art, either alone or in combination, does not teach, suggest or otherwise render obvious those

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claims. Applicants note that claim 24, an independent claim from which claims 25-30 depend, is amended by the present response generally similarly to claim 16, to recite a computer-readable storage having stored thereon a computer program having a plurality of code sections, the code sections executable by a processor for causing the processor to perform the operations comprising, *inter alia*, "determining whether a value of the service option parameter corresponds to one of a firmware update service option and a software update service option, wherein the one of a firmware update service option number and a software update service option number is a number assignment module parameter specific to updating one or both of firmware and software." Applicants respectfully submit that, for at least the reasons discussed previously, the cited art does not teach, suggest, or otherwise render obvious at least those aspects of the subject matter claimed by claim 24. Applicants further respectfully submit that claim 24 and its dependent claims are allowable under 35 U.S.C. §103.

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Conclusion

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

Applicants believe that all of the pending claims are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to contact the undersigned at (312) 775-8000 for an interview.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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